



## Applicant Responsibilities and Plan Requirements for Single Family and Two-Unit Dwelling Units

July 2002

This Client Assistance Memo summarizes the Department of Design, Construction and Land Use (DCLU) requirements for plan and support documents accompanying an application for a building permit for a single family or two-unit (R-3, U-1 occupancies) dwelling. In order to file a building permit application, the applicant is required to submit plans and information as detailed in this memo.

Permit applicants are encouraged to read this and other DCLU public information documents before filing an application. To obtain copies of this information, visit our website at [www.cityofseattle.net/dclu/publications](http://www.cityofseattle.net/dclu/publications) or stop by our Public Resource Center, located on the 20th floor of Key Tower at 700 Fifth Avenue in downtown Seattle.

### Helpful Publications

#### Client Assistance Memos (CAMs)

<b>CAM 103</b>	Plot Plan Requirements
<b>CAM 103A</b>	Plot Plan Guidelines
<b>CAM 106</b>	General Standards For Plans And Drawings
<b>CAM 220</b>	Lot Coverage and Yard Standards in Single Family Zones
<b>CAM 303A</b>	Common Single Family and Duplex Building Code Requirements
<b>CAM 316</b>	Subject-to-Field-Inspection (STFI) Permits
<b>CAM 403</b>	NFRC Glazing U-factors

#### Single Family Zoning Chart

### Preparing for an Appointment

Except for Subject-to-Field-Inspection permits (STFIs), building permit applications are accepted by appointment only. The following steps are required **prior** to make an application intake appointment:

- Fill out an **Address/Records Worksheet** and a **Preapplication Site Visit Request Form**, available online at [www.cityofseattle.net/dclu/publications/forms](http://www.cityofseattle.net/dclu/publications/forms) or from our Applicant Services Center, located on the 20th floor of Key Tower, 700 Fifth Avenue, (206) 684-8850.
- Submit these forms to DCLU, along with all required documents listed and the applicable fee for a preapplication site visit. Submittal instructions are included on the forms.
- After DCLU staff mail or fax you a **project number**, call the Applicant Services Center at (206) 684-8850 to have your **plans screened** in preparation for an application intake appointment.

If you have any questions about these steps, please visit or call the Applicant Services Center.

### Providing Plans & Coversheets

In order to apply for a building permit, you will need at least **two sets of detailed plans** meeting the standards of CAM 106 (similar to drawings shown in this CAM) and **completed coversheets**. Coversheets are available from commercial print shops in Seattle; samples are available from the Applicant Services Center receptionist.

Fill out all applicable information listed on the cover-sheet before filing a permit application. The cover-sheet is a tool which summarizes and organizes required information so that DCLU intake personnel and plans reviewers can find it quickly and easily. Your application will not be accepted unless accompanied by plans with completed coversheets.

## Required Information

The following types of information are required by DCLU in order to consider applications for single family and two-unit dwelling building permits. If any required information is not included at your intake appointment, your application will not be accepted.

### NEW HOUSE(S)

- **TWO COMPLETE SETS OF PLANS** are required, which include:
  - **Plot plan**, per CAM 103 (include 1 additional copy for sewer use)
  - **Floor plans**
  - **Glazing and opaque door schedule**
  - **Foundation plan** (stamped by structural engineer if in slide area)
  - **Elevations** (showing existing and finished grade)
  - **Framing plan(s)**
  - **Elevations** (showing existing and finished grade)
  - **Typical section**
  - **Details** as necessary
  - **Plan cover sheets**
  - **Drainage control plan** (if site has more than 2000 sq.ft. impervious surface or if located in an environmentally sensitive area)
  - **Building grade sheets** (Seattle Transportation requirement)
  - **Garage floor elevation** to City of Seattle datum
  - **Masonry chimney section/detail** (if applicable)
  - **Grading plan** (if environmentally sensitive area or if over 100 cubic yards elsewhere)
- **ONE ADDITIONAL SET OF PLANS** will be required if any appealable land use component is part of this application
- **SOILS REPORT** if available or required (2 copies)
- **ENERGY CALCULATIONS** (1 copy) (or prescriptive choice)
- **EQUIPMENT SIZING CALCULATION FORM** (1 copy)
- **STRUCTURAL CALCULATIONS** if available, required for "skinny" houses (1 copy)
- **TRUSS DESIGN** for manufactured trusses (3 copies)
- **WATER AVAILABILITY CERTIFICATE** (1 copy)
- **HEALTH DEPARTMENT APPROVAL** if dwelling unit is on septic system (1 copy)
- **TOPOGRAPHIC SURVEY** (1 copy) with corner

stakes and all property lines when:

- within two feet of maximum allowed height;
- using a land use height bonus or exception per the land use code;
- grading plans are required, or
- when located in an identified slide area
- **MASTER USE PERMITS** previously applied for associated with this project:
  - If issued, a copy of the approved plans and decision must be available at time of application intake for reference
  - If pending, reference project number and make sure that application being filed matches application currently in process
- **A COMPLETE LEGAL DESCRIPTION OF THE PROPERTY** including easements, side yard agreements, etc. shall be included on the plot plan of the application
- **A RECORDED COPY OF SHORT PLAT, BOUNDARY LINE ADJUSTMENT, SUBDIVISION OR OTHER PLATTING APPROVAL** and the written approval report will facilitate the zoning/land use review, if the property boundary has been created or altered since 1974
- **BONDS**; if this project involves a moved building a bond will be required at time of application intake in an amount to be determined by the Chief Building Inspector.
- **SEPA CHECKLIST** if in an environmentally critical area, if more than one unit, or if greater than 9,000 square feet of developmental coverage
- **ZONING CALCULATIONS** for lot coverage
- **BLOCK FRONT PLAN** for front yard averaging, if applicable (see **Figure 6**)

### ADDITIONS

- **TWO COMPLETE SETS OF PLANS** are required, which include:
  - **Plot plan** (see CAM 103)
  - **Floor plans**
  - **Glazing and opaque door schedule**
  - **Foundation plan** (information showing load tracing to the foundation)
  - **Framing plan(s)**
  - **Elevations** (showing existing and finished grade)
  - **Typical section**

- **Details** as necessary (to show how the addition integrates into the existing structure)
- **Plan cover sheets**
- **Drainage control plan** (if adding more than 2000 sq.ft. impervious surface)
- **Building grade sheets** (if adding or changing driveway) (available from SEATRAN)
- **Garage floor elevation** to City of Seattle datum if new garage is proposed
- **Masonry chimney section/detail** (if applicable)
- **Grading plan** (if environmentally sensitive area or if over 100 cubic yards elsewhere)
- **ONE ADDITIONAL SET OF PLANS** will be required if any appealable land use component is part of this application
- **SOILS REPORT** if available or required (2 copies)
- **ENERGY CALCULATIONS** (show existing, proposed, total) (1 copy)
- **EQUIPMENT SIZING CALCULATION FORM** (1 copy)
- **STRUCTURAL CALCULATIONS** (if available) (1 copy)
- **TRUSS DESIGN** for new manufactured trusses (3 copies)
- **HEALTH DEPARTMENT APPROVAL** if dwelling unit is on septic system (1 copy)
- **TOPOGRAPHIC SURVEY** (1 copy) with corner stakes and all property lines when addition:
  - is within two feet of maximum allowed height;
  - is using a land use height bonus or exception per the land use code;
  - has grading plans required, or
  - is located in an identified slide area and the footprint is being enlarged
- **MASTER USE PERMITS** previously applied for associated with this project:
  - If issued, a copy of the approved plans and decision must be available at time of application intake for reference
  - If pending, reference project number and make sure that application being filed matches application currently in process
- **A COMPLETE LEGAL DESCRIPTION OF THE PROPERTY** shall be included on the plot plan of the application
- **A RECORDED COPY OF SHORT PLAT, BOUNDARY LINE ADJUSTMENT, SUBDIVISION OR OTHER PLATTING APPROVAL** and the written approval report will facilitate the zoning/land use

review, if the property boundary has been created or altered since 1974

- **SEPA CHECKLIST** if in an environmentally critical area and grading in excess of exempt amounts
- **LOT COVERAGE CALCULATIONS** if project increases structure footprint

## ALTERATIONS

- **TWO COMPLETE SETS OF PLANS** are required, which include:
  - **Plot plan** (see CAM 103)
  - **Floor plans**
  - **Glazing and opaque door schedule**
  - **Foundation plan** (information showing load tracing to the foundation if structural changes are included)
  - **Framing plan** (if new framing or change in structural system is proposed)
  - **Elevations** (if changes are proposed to building envelope or window location or sizing)
  - **Typical section** (based upon the scope of the work to be performed)
  - **Details** as necessary (to show how changes integrate into the existing structure)
  - **Plan cover sheets**
  - **Masonry chimney section/detail** (if applicable)
  - **Grading plan** (if environmentally sensitive area or if over 100 cubic yards elsewhere)
- **ONE ADDITIONAL SET OF PLANS** will be required if any appealable land use component is part of this application
- **ENERGY CALCULATIONS** if changes to openings or occupiable floor area are proposed (1 copy)
- **EQUIPMENT SIZING CALCULATION FORM**
- **STRUCTURAL CALCULATIONS** (if available and structural changes are proposed) (1 copy)
- **SOILS REPORT** (if available) (2 copies)
- **TRUSS DESIGN FOR NEW MANUFACTURED TRUSSES** (3 copies)
- **HEALTH DEPARTMENT APPROVAL** if dwelling unit is on septic system (1 copy)
- **TOPOGRAPHIC SURVEY** (1 copy) with corner stakes and all property lines when:
  - within two feet of maximum allowed height,
  - using a land use height bonus or exception per the Land Use Code;
  - grading plans are required, or

- when located in an identified slide area
- **MASTER USE PERMITS ASSOCIATED WITH THIS PROJECT:**
  - If issued, a copy of the approved plans and decision must be available at time of application intake for reference
  - If pending, reference project number and make sure that application being filed matches application currently in process
- **A COMPLETE LEGAL DESCRIPTION OF THE PROPERTY** shall be included on the plot plan of the application
- **A RECORDED COPY OF SHORT PLAT, BOUNDARY LINE ADJUSTMENT, SUBDIVISION OR OTHER PLATTING APPROVAL** and the written approval report will facilitate the zoning/land use review, if the property boundary has been created or altered since 1974.
- **LOT COVERAGE CALCULATIONS** if project increases structure footprint

*Please note that the drawings included in this CAM are for illustrative purposes only. Specific design details and measurements will, of course, vary among projects.*

*On all plans include a legend to differentiate new elements from existing elements.*

## INFORMATION REQUIRED FOR SPECIFIC TYPES OF PLANS

### ALL PLANS:

- Must be to scale and fully dimensioned;
- Must have matching scale and be consistent with other drawings;
- Must have minimum 1/8" lettering;
- Must show structural notes including design loads.
- Must illustrate compliance with the ventilation requirements of Section 406, Seattle Mechanical Code

### FOUNDATION (Figures 2 and 3):

- All new foundations;
- Existing foundations where additional floor space or roof area is being added over or adjacent to existing foundations;

- Dimensions of all foundation walls, footings and under-floor vents or access holes
- Location and size of posts and beams; intended use of space above or within foundation walls (e.g. basement, crawl space, garage, recreation room);
- For a remodel of an existing building, all changes to existing structural elements (e.g. joists, bearing walls);
- Indicate concrete mix by number of sacks and allowed design stress.

### FLOOR (Figures 2 and 3):

- Identify all walls (existing, new and to be removed) steps, doorways, windows and sky lights;
- Use of each room must be specified;
- Width and height of all window and doorway openings;
- Exhaust fan locations and cfm;
- Location of all furnaces, heaters and heat pumps;
- Identify proposed change of use for any area within the structure;
- Fully dimension, to scale, all rooms and areas shown on the plan.

### FRAMING (Figures 2 and 3):

- Identify size, grade, species, spacing and direction of floor and ceiling joists and rafters;
- Show all supporting walls, beams and columns;
- Show how existing framing will be connected to new proposed framing.

### STRUCTURAL WALL SECTION (Figure 4):

- Must show entire cross-section through a typical wall from foundation to the roof;
- Any wall section in the building which is different than the typical section must be identified and detailed by section.
- The location of the cross-section must be identified on the floor plan.
- **MATERIALS** must be specified, as to size, spacing and type;
  - **Insulation** - type, location and "R" value of all wall, floor, slab and ceiling insulation shall be identified;
  - **Foundation** - size and type of materials to be used including foundation dimensions, sill plate material and size, size and spacing of anchor bolts, size and location of reinforcing bars, height of backfill against foundation walls, height of foundation wall above grade and footing depth below grade;
  - **Wall section** - size and spacing of wood studs, thickness and type of sheathing, weatherproofing and siding material;
  - **Flooring** - size and type of sub-floor underlay-

ment and flooring material and the size, species, spacing and direction of floor joists and beams;

- **Ceiling** - ceiling height and ceiling material and the size, species, spacing and direction of all ceiling supporting elements;
- **Roofing** - roof sheathing, weatherproofing, roofing materials to be used and the size, species, spacing and direction of the roof's structural elements; also show dimensioned roof overhangs, including gutters; specify roof pitch.

#### **BUILDING ELEVATIONS (Figure 5):**

- Elevations showing all exterior faces of the building;
- All doors, windows and exterior materials must be shown, including the size of all doors and windows and the type of windows ( e.g. slider, casement, fixed) ;
- Each elevation shall be labeled as to the face of the building it represents (north, south, etc.);
- The elevation of all floors, top plate, top of the roof, existing grade and finished grade must be shown.
- If a land use height bonus is being used to increase the height of the structure or if the structure is within 2 ft. of the maximum allowed height per the Land Use Code, the elevations must include detailed survey datum for existing and finished grade at all corners of the building.

#### **PARTIAL BLOCK FRONT PLAN (Figure 6)**

#### **GLAZING AND OPAQUE DOOR SCHEDULE (Figure 7):**

- The glazing schedule must include vertical and overhead glazing (windows, sliding and swinging glass doors, glass block, skylights, etc.)
- The glazing and opaque door schedules must include the product type, size, number of each type, the U-factor, and whether the U-factor is NFRC-certified or default. (If a default is used, the schedule must include a description of the key energy-efficiency features that are necessary to achieve that default U-factor.)
- The glazing schedule must include the manufacturer and model number for all products with a U-factor less than 0.40. (This includes prescriptive option I in Table 6-1. It also may include Target UA and annual energy analysis compliance options.)

#### **REFERENCES**

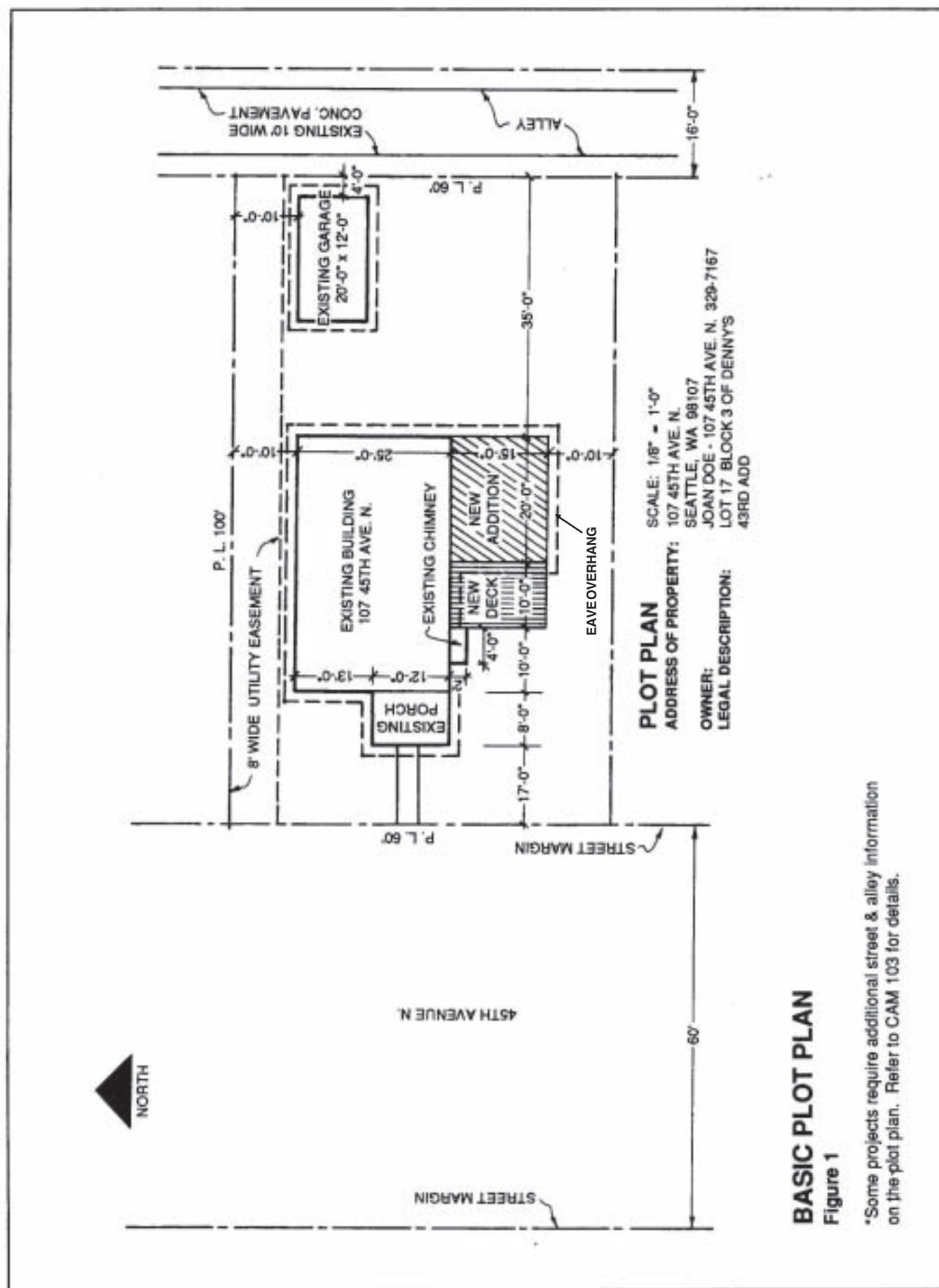
1997 Seattle Building Code  
1997 Seattle Mechanical Code  
2002 Seattle Energy Code

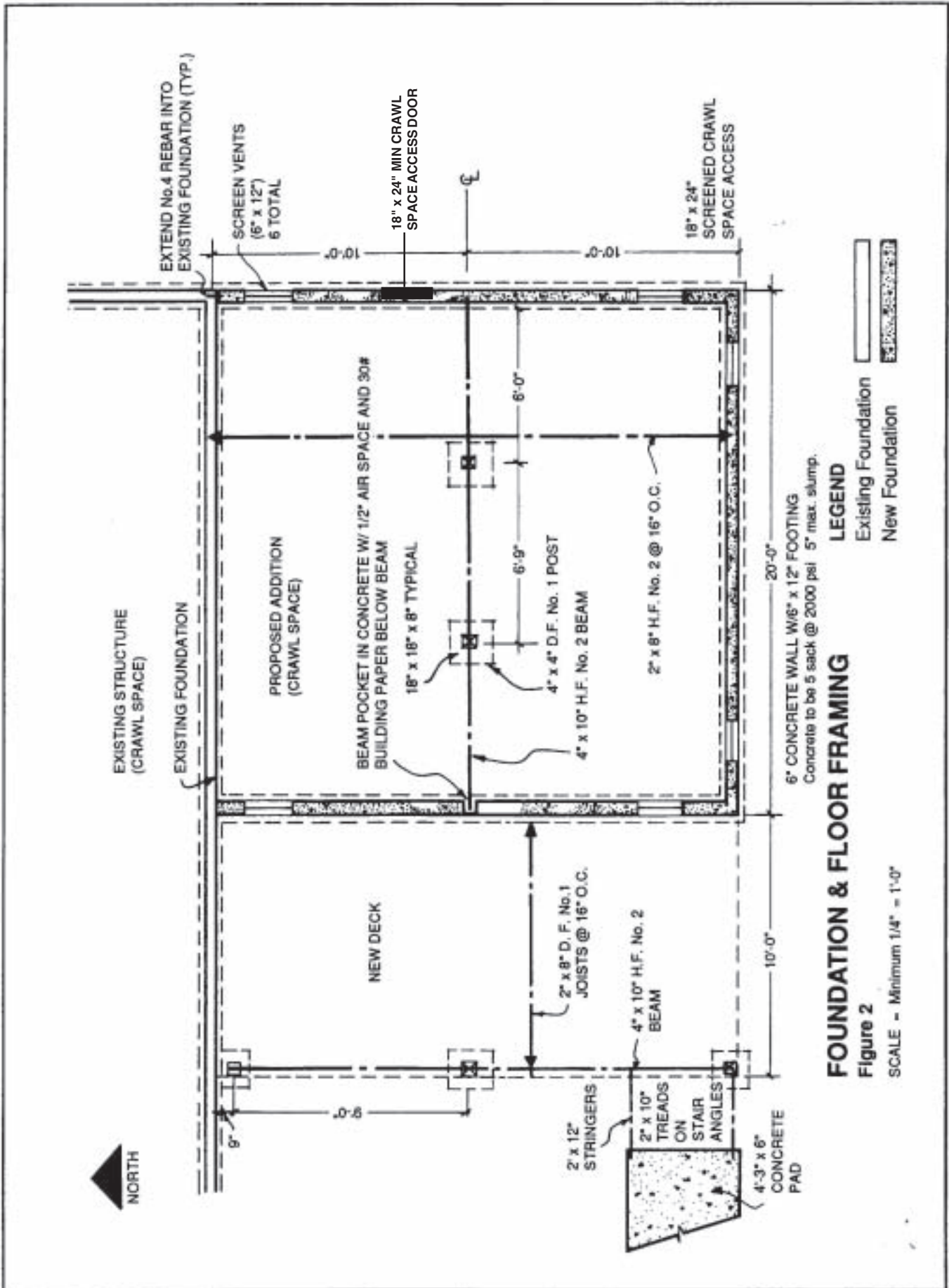
**PLEASE NOTE: DCLU public information documents should not be used as substitutes for codes and regulations. Details of every project should be reviewed for specific compliance with the codes and regulations. For specific questions please contact a permit specialist at (206) 684-8850. For Building Code technical back-up, please call (206) 684-4630 for assistance. For Energy/Mechanical Code technical back-up, please call (206) 684-7846.**

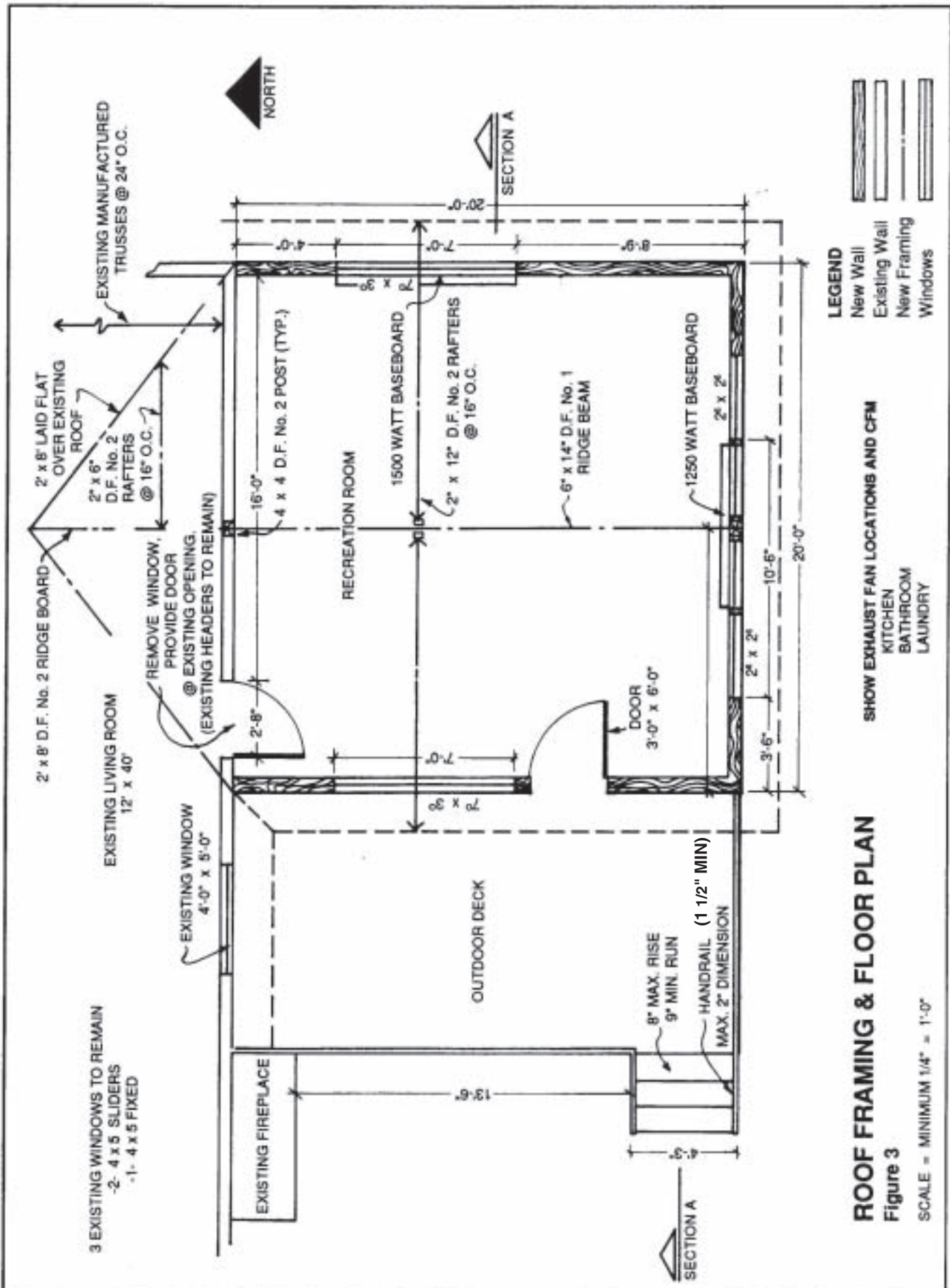
### **Access to Information**

Links to electronic versions of many of the DCLU documents mentioned in this CAM are available on the "Publications" and "Codes" pages of our website at [www.cityofseattle.net/dclu](http://www.cityofseattle.net/dclu). Paper copies are available from our Public Resource Center, located on the 20th floor of Key Tower at 700 Fifth Avenue in downtown Seattle, (206) 684-8467.

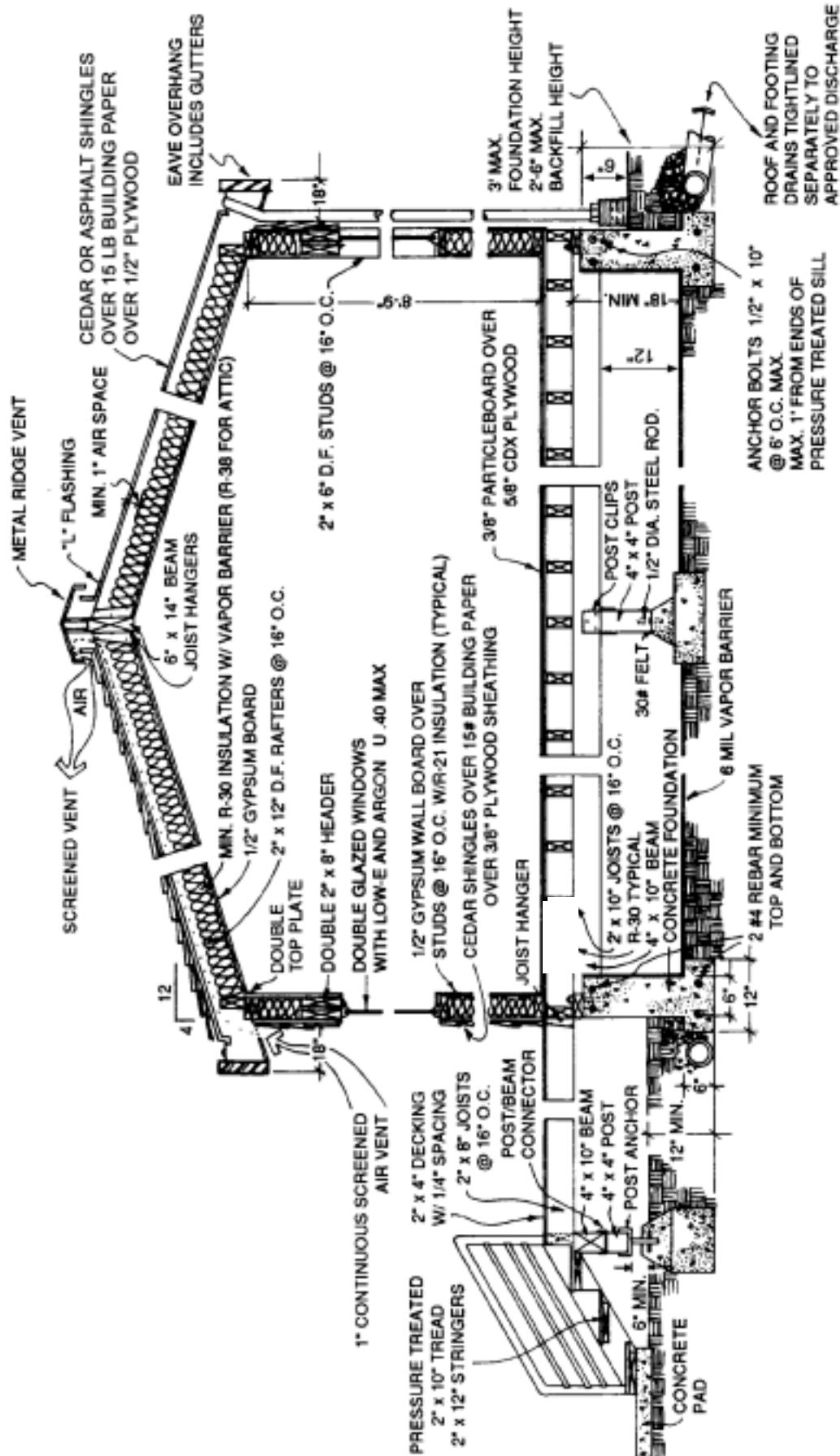






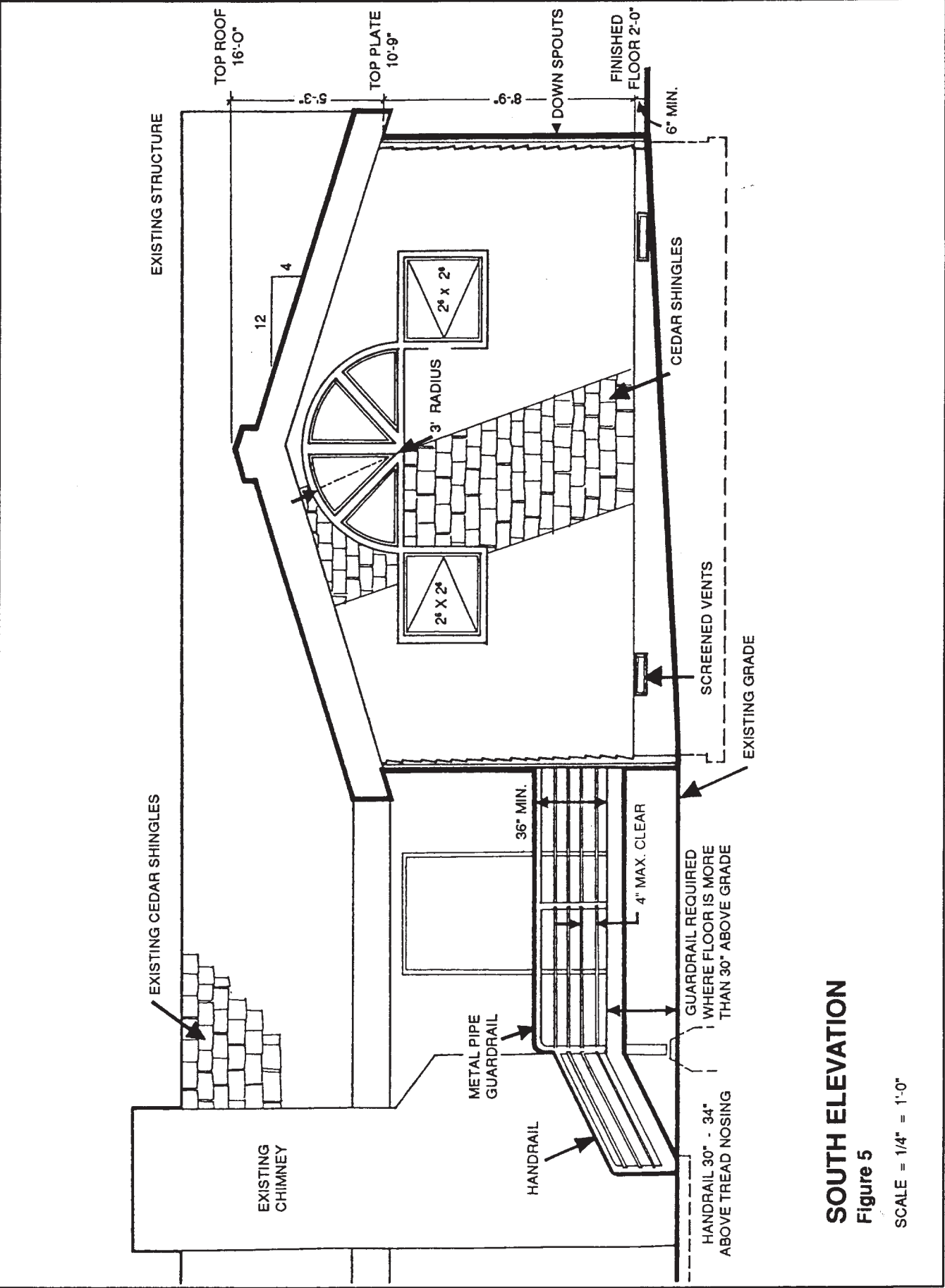


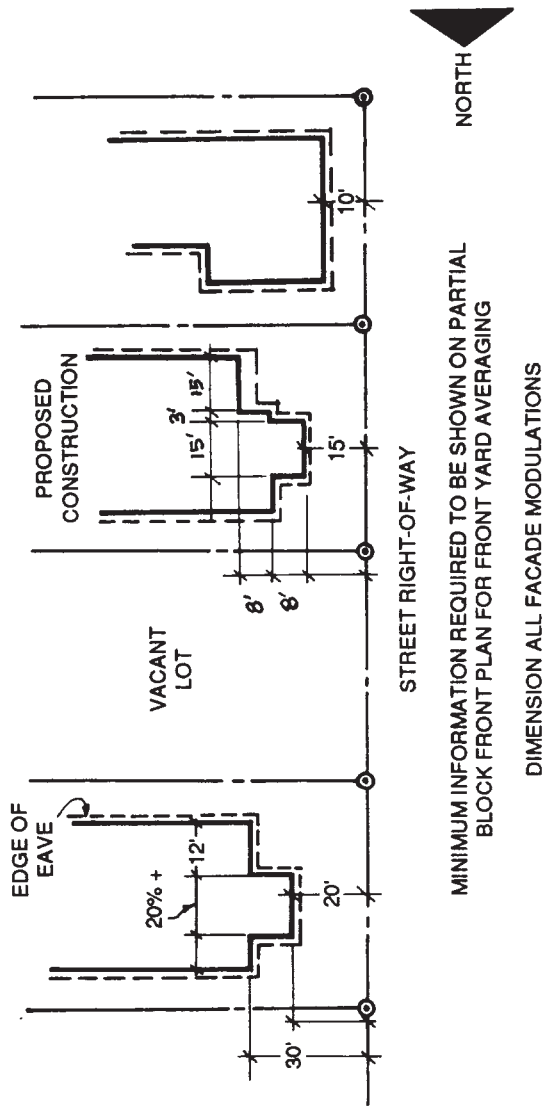




**STRUCTURAL SECTION A-A**

SCALE - MINIMUM 1/4" = 1'-0"





**PARTIAL BLOCK FRONT PLAN**  
Figure 6

**(Sample)**

## GLAZING AND OPAQUE DOOR SCHEDULE

GLAZING (VERTICAL)									
Glazing Number	Plan Page	Manufacturer/Model No. and Special Features	Product Type	Size (W x H)	Area (Sq. Ft.)	No.	Total (VGA)	U-Factor NFRC-certified	VGA x U =
SLW-1	A-3,4	Best Energy/123 w/low-E & argon	slid. win.	3'0" x 5'0"	15.0	x 4	= 60.0	0.33	19.8
SLW-2	A-3,4	Best Energy/123 w/low-E & argon	slid. win.	4'0" x 6'0"	24.0	x 2	= 48.0	0.33	15.8
PIC-1	A-3	Best Energy/153 w/low-E & argon	fixed win.	5'0" x 5'0"	25.0	x 2	= 50.0	0.31	15.5
GAR-1	A-3	Greenhouse/vinyl/dbl/low-E/argon	garden win.	3'0" x 4'0"	12.0	x 1	= 12.0	-- 1.47	17.6
SLD-1	A-3,4	Best Energy/203 w/low-E & argon	slid. door	6'0" x 6'8"	40.0	x 1	= 40.0	0.36	14.4
Total VGA =							210.0	Total VGA x U =	83.1
Area-Weighted Average Vertical Glazing U-Factor = (Total VGA x U) / (Total VGA) =									
GLAZING (OVERHEAD)									
Glazing Number	Plan Page	Manufacturer/Model No. and Special Features	Product Type	Size (W x H)	Area (Sq. Ft.)	No.	Total (OGA)	U-Factor NFRC-certified	OGA x U =
SKY-1	A-5	Sky Systems/57 triple w/low-E	skylight	2'0" x 4'0"	8.0	x 2	= 16.0	0.52	8.32
SKY-2	A-5	Alum. clad vinyl/triple dome	skylight	2'0" x 2'0"	4.0	x 2	= 8.0	-- 0.67	5.36
Total OGA =							24.0	Total OGA x U =	13.68
Area-Weighted Average Overhead Glazing U-Factor = (Total OGA x U) / (Total OGA) =									
0.570									
OPAQUE DOOR									
Number	Plan Page	Manufacturer/Model No. and Special Features	Product Type	Size (W x H)	Area (Sq. Ft.)	No.	Total (TDA)	U-Factor NFRC-certified	TDA x U =
INS-1	A-3	Insuldoor/VIZ insulated metal w/tb	swing. door	2'8" x 6'8"	17.8	x 2	= 35.6	0.09	3.2
WD-1	A-3	Woodland/26 1-3/4 wood w/1-1/8 panels	swing. door	3'0" x 6'8"	20.0	x 1	= 20.0	-- 0.39	7.8
Total TDA =							55.6	Total TDA x U =	11.0
Area-Weighted Average Opaque Door U-Factor = (Total TDA x U) / (Total TDA) =									
0.198									